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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,302	10/20/2003	William J. Jones	247171-000252USPT	2862
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CUMMINS-ALLISON CORP. C/O NIXON PEABODY LLP 161 N. CLARK ST., 48TH FLOOR CHICAGO, IL 60601			EXAMINER EBERSMAN, BRUCE I	
			ART UNIT 3691	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/689,302

Applicant(s)

JONES, WILLIAM J.

Examiner

BRUCE I. EBERSMAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-77 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 and 75-77 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 46-74 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

Applicant's arguments, filed 4/30/08, with respect to the rejection(s) of claim(s) 1-77 under 35 USC 103a have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a new search. Applicant has amended claims 1,5,25,32,58,61,71, converting claim 32 into independent format. Pursuant to a restriction requirement, applicant attorney has agreed to restrict the application to claims 1-45 and 75-77.

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-45,75-7 drawn to multistage currency processors, classified in class 705, subclass 1.
 - II. Claims 47-74, drawn to currency processing system, classified in class 705, subclass 1.
2. During a telephone conversation with Paul Kitch, attorney for applicants, on 7/31/08 a provisional election was made to claims 1-45, and 75-77 without traverse to prosecute the respective inventions. Affirmation of this election must be made by applicant in replying to this Office action. Claims 46-74 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the claims of 46-74 are a currency processing system. The subcombination has separate utility such as multi-stage currency processing system where the system could be in a distributed application.

The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

4. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above

and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement

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will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

CLAIM REJECTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1,2,3,4,6,12,13,17,18,22,23,24,25,29,32,38,39,75,77 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Applicant uses the term "adapted to" for example claims 1, The use of the term "adapted to" is not a positive recitation of use and reads on any system which can be adapted to operate in the same manner. As such, the claims are interpreted in a broader light than if a positive recitation is made.

CLAIM REJECTIONS- 35 USC 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 11-46, 75-77 rejected under 35 USC 103(a) as being unpatentable over Glory UW-200 Series Currency Processor, (Glory overview) (Glory manuals UW-200 Manual and GFR-100 Manual are concatenated to the UW-200 reference in order to show the details of the system) in view of US Patent 5917930 to Kayani

As per claims 1, 25,32,75 Glory discloses;

A first currency processing stage including a plurality of currency processing devices each having at least one output receptacle, (Glory UW-200 page 1, top left, see drawing) each of the devices being adapted to denominate currency bills, (Glory UW-200, depicts Glory GFR 100 device, see manual, 18, (24 of document) P. 1 of Glory),

being adapted to output a plurality of first batches of currency bills processed in the first stage, (Glory p. 1) each first batch having an associated first total corresponding to the value of the currency bills in a respective first batch; (Glory p.1, p. 24, which is manual p. 18 of GFR 100 – total for transaction)

the second stage including at least one second stage currency processing device having a plurality of output receptacles, (Glory UW-200 p1. 1)

the at least one second stage currency processing device being adapted to denominate currency bills (Glory, UW-200, (manual p. 20), p. 59 of reference discloses ability to denominate) and to sort currency bills into the plurality of output receptacles, (Glory, p1 shows receptacle bids for types of bills)

the at least one second stage device adapted to determine a second total associated with each first batch processed by the at least one second stage device, (Glory p. 1, shows linking, p. 54 of reference, totaling) the second total corresponding to the value of the currency bills in a first batch processed by the at least one second stage device, (Glory, p.1 shows system, p. 59 of reference shows ability to total)

the second stage being adapted to output a plurality of second batches of currency bills processed in the second stage, each second batch having an associated third total corresponding to the value of the currency bills in a respective second batch; (Glory p. 1, and p. 59 of reference)

a third currency processing stage for receiving the second batches from the second stage, the third stage having a plurality of third stage currency processing devices each having at least one output receptacle, each 3rd stage device being adopted to count

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currency bills and to suspend operation when a pre-determined number of currency bills are transported to the at least one output receptacle, the third stage devices each being adapted to determine a forth total associated with each batch processed by a third stage device. (The application publication 0021 of this application states that the 1st and 3rd stage devices can be of the same type, and thus Glory FGR could be such a 3rd stage device, Glory GFR 100 has the capability to stop after predetermined number of bills, see p. 3 of GFR 100 manual, p. 9 of reference)

a central processing device interfaced with each of the first, second, and third stage currency processing devices, the central processing unit adapted to receive information from each of the second and third stage processing devices, the central processing unit being adapted to compare first totals to second totals, the central processing unit being adapted to compare third totals to forth totals. (Glory p. 1 depicts a CPI linking GFR devices and a UW-200, ie could be adapted to be used in such a manner as, the stage 1 and stage 3 devices are the same type of devices, Glory could be adapted or interpreted as capable of performing, Glory discloses the ability to link various operations in existing system, p.1)

Glory depicts a linking of various 1st /3rd and 2nd stage processors with a computer without fully disclosing whether the machines are 1st or 3rd stage devices and the full operation. However, one of ordinary skill in the art would arrange such devices in this manner in order to manage the currency handling of a bank or other organization. Glory does not explicitly disclose;

the application of a currency processor which performs the entire operation from the teller to sorting currency for use at a commercial deposit or bank .

Kayani teaches the application of a currency processor which performs the entire operation from the teller to sorting currency for use at a commercial deposit or bank . (col. 5, lines 40-50) It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to decentralize the application of Kayani with the structure of Glory for the motivation of securely being able to process deposits from a variety of stations and aggregate and check them in a centralized location. (col. 2, lines 1-20)

Claim 32 adds the following which are taught by Kayani

Kayani teaches an operator (Col. 3, line 2), devices of various stages incorporated into a device (see application col. 2, line 20-35, ie intake, processing, denominating, sorting etc), currency processed by first stage during a specified period of time (Col. 2, line 30), and customer identification. (Col. 2, line 62).

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to decentralize the application of Kayani with the structure of Glory for the motivation of securely being able to process deposits from a variety of stations and aggregate and check them in a centralized location. (col. 2, lines 1-20)

Further, the claimed processing system appears to be claiming the automation via a computer or a combination of existing and patented off the shelf equipment. In *In re. Venner*—262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958) the court held that broadly

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providing an automatic or mechanical means to replace manual activity which accomplished the same result is not sufficient to distinguish over the prior art. Likewise, in *In re Larson*, 340 F.2d 965, 968, 144 USPQ 34, 349 (CCPA 1965), the court further held that incorporating existing functions, ie combining existing elements that are usable together was not patentable.

Applicant's invention as claimed appears in sum to be claiming a combination of existing machines coupled by computer. The prior art cited appears to accomplish the same end claimed functionality in an automated fashion.

As per claims 2, 26 Glory discloses an operator interface. (Glory p. 8 of reference, and p1.

As per claims 3, 4 Glory, (p1) shows a multi purpose currency processor system linked by computers to a central processing unit, where the application uses the terms "adapted to", the linking disclosure would be adaptable to like "stage" 1 type devices which are further the same type of devices as "stage 3 devices" which could be GFR type devices by Glory.

As per claim 6, Glory does not explicitly disclose an operator number. Kayani teaches tracking the operator associated with processing of the first batch, in this case, the teller or branch, (Col 2, line 60) by the use of special separator cards. The operator of the machine or device would be inherently associated with the use of banking machines

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with controllers and or computers. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the currency processor disclosure of Glory with the operator tracking of Kayani for the motivation of increasing the security of the process. (col. 1, lines 10-30)

As per claims 11, 27, Glory does not explicitly disclose the tracking of individual customer inputs though that would be one use of such a system. Kayani teaches separator cards to separate batches. (Col 2, line 60) and further discloses that the separator cards could separate by teller, by customer depositing etc. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of Glory with the separator teachings of Kayani for the motivation of tracing currency collected to individual deposits to insure the integrity of the process of accepting deposits at a bank. (col. 2, lines 1-20)

As per claims 12, 13, 33, 34 Glory does not explicitly disclose error signal comparisons of batches. Kayani teaches (Col. 6, line 15) discloses error detection capabilities related to comparing inputs and outputs and further has error signaling (Col. 7, line 25). It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the currency processor disclosure of Glory with the error detection teachings of Kayani for the motivation of processing numerous depositions in a manner consistent with detecting errors for the security of the overall process. (col. 1, lines 30-45)

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As per claims 14, 15, 35, Glory discloses the capability to sort discloses sorting currency by denomination (p. 1, p 2 shows counters, for both the 1st and stage machines, see attached manuals for more detail)

As per claims 16, 36 Glory discloses 1st/3rd stage devices and operators. (p1, p2) Glory can be adopted to receive operator input as to the currency denomination to be processed as, each of the Glory machines has an operator interface which can be so used or adapted.

As per claims 17-19, 37, 38, 40 Glory discloses a variety of error detection related to a suspicious bill which does not match the expected denomination. (p. 44 for example)

As per claims 20, 41, Glory discloses two output receptacle machines. (p. 1)

As per claims 21,42, Glory does not explicitly combine single pocket devices with the UW-200 system but, Glory p. 78 discloses a single output receptacle machine which could be so utilized in a system instead of a 2 output device.

As per claim 22-24 and 43-45, Glory, p1 and p.17 disclose verification of currency and suspicious note detection capability .

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As per claim 29, Glory p1. shows a computer (central processor) connected to 1st stage (same as 3rd stage) devices and a 2nd device. (p1).

As per claim 30, Glory p. 1 depicts batches of output from a UW-200.

As per claim 31, Glory p. 1, discloses sorting by denomination into sort bins).

As per claim 39 Glory UW-200 has the capability to offsort a suspicious note, and further can signal a count stop (p. 43)

As per claim 76, Kayani (Col 2, line 35) teaches a currency processing machine that can take an individual teller's pay-in collections over the course of a shift.

As per claim 77, Glory p. 46 discloses the feature capability of counting and stopping a predetermined number of bills.

Claims 5 rejected under 35 USC 103(a) as being unpatentable over Glory UW-200 Series Currency Processor, (Glory overview) (Glory manuals UW-200 Manual and GFR-100 Manual are concatenated to the UW-200 reference in order to show the details of the system) in view of US Patent 5917930 to Kayani further in view of US Patent 5996314 to Pennini

As per claim 5, Glory discloses output bins (p1) but, (Glory and Kayani) do not explicitly disclose; the at least one second stage device comprises a plurality of storage cassettes associated with the plurality of output receptacles and wherein each second

batch corresponds to currency contained in a storage cassette associated with one of the plurality of the output receptacles of the second stage device.

Peninni teaches currency cassettes used as part of a strapping machine. (col. 3, lines 15-25). It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the currency system of Glory with the cassette disclosure (vs. bins in Glory) for the motivation of holding currency notes prior to banking or further processing. (col. 1lines 10-30)

Claims 7-10 rejected under 35 USC 103(a) as being unpatentable over Glory UW-200 Series Currency Processor, (Glory overview) (Glory manuals UW-200 Manual and GFR-100 Manual are concatenated to the UW-200 reference in order to show the details of the system) in view of US Patent 5917930 to Kayani further in view of Official Notice

As per claims 7-10, Glory does not explicitly disclose how the first stage is used in the context of recording the first stage (7,8), time period (9) and work operator (10). Kayani teaches a system of separator cards to track the currency processed at a particular time and by the machine. Kayani does not explicitly disclose recording the device number, time, day and operator and shift of the operator for the purpose of tracking particular lots of currency traceable to an operator, device. The examiner takes official notice that tracking operator number, shift and device number are common to computer controlled processes which may require quality or other accountability tracking for the purpose of identifying a machine problem or operator issue. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the hardware

disclosure of Glory with the tracking disclosure of Kayani with the officially noticed capability of computers to track product in a specialized machine as well as to track operators for the purpose of creating a currency separator/sorter machine which could further help identify mechanical or user "faults".

Response to Arguments

5. Applicant's arguments, see amendment, filed 4/30/08, with respect to rejections under 35 USC103a have been fully considered and are persuasive. The rejection of respective claims 1-77 has been withdrawn. Applicant pointed out that application 2004/0003980 to Hallowell was owned by Cummins-Allison at the time of the invention and thus, the reference was disqualified under 35 USC 103c.
6. New grounds of rejection were established utilizing disclosure by Glory of a multi-stage currency processing system further in view of Kayani which was cited in the first office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRUCE I. EBERSMAN whose telephone number is (571)270-3442. The examiner can normally be reached on 630am-5pm, Monday-Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bruce I Ebersman
Examiner
Art Unit 3691

/Hani M. Kazimi/
Primary Examiner, Art Unit 3691

